

REMARKS

Claims 1-31 are pending in this application. Claims 17-21 and 27-31 have been canceled. Claim 32 has been added.

Rejection of claims 1-31 under 35 U.S.C. § 112, second paragraph

The Examiner has rejected claims 1-31 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicants respectfully traverse the rejection.

Claims 1, 12, 13, and 15 have been amended to remove the multiple periods. As suggested by the Examiner, Applicant has deleted the term "heterdiazinon" from claims 1 to 12. The substituents that can be used in R¹ or R² are as described on page 32, line 7 bridge to page 35, line 15 of the Specification. The term "heteroaryl" is described on page 31, line 8 to line 21 of the Specification. The term "optionally substituted amide group" is as described on page 35, lines 1 to 6 of the Specification. The substituent to the amide group is attached to the nitrogen atom of the amide group. The substituent to the amide group should be attached to the nitrogen atom. As used in the specification, the terms "cycloalkyl" does not necessarily include "adamantyl" because the term "cycloalkyl" is further defined by lower. (See page 31,

line 22 of the specification). As to the diseases encompassed by claims 22 and 23, the diseases are defined by the mechanism of action of the compounds and would be apparent to one skilled in the art. Applicants believe that the amendments that were made to correct format and the description given in the specification distinctly claim the subject matter of the claimed invention. Withdrawal and reconsideration of the rejection are respectfully requested.

Rejections of claims 22-26 under 35 U.S.C. § 112, first paragraph

The Examiner has rejected claims 22-26 under 35 U.S.C. § 112, first paragraph, because the specification does not reasonably provide enablement for the claimed subject matter. Applicants respectfully traverse this rejection.

The compounds of the present invention have non-NMDA excitatory amino acid receptor antagonistic action. Excitatory amino acids (hereinafter abbreviated to EAAs) govern excitatory neurotransmission in the central nervous system and excessive release or accumulation of these EAAs in synaptic clefts in nerve cells causing abnormal excitation in the central nervous system, leading to nerve degeneration, mental disorders and motor function disorders. (See the references A, which are attached as Appendix A,

that support the relationship between treatment of diseases and EAAs.) As the compounds of the present invention work against this activity, those disorders, such Alzheimer's disease, Parkinson's disease, amyotrophic lateral sclerosis, and Huntington's chorea, can be treated using the compounds of the present invention. (See Experimental Examples 1, 3 and 4). Withdrawal and reconsideration of the rejection are requested.

Rejections of claims 27-31 under 35 U.S.C. § 101

The Examiner has rejected claims 27-31 under 35 U.S.C. § 101, because the claims set forth a use without reciting any steps in the process. Applicants respectfully traverse the rejection. However, to advance prosecution of the application, claims 27-31 have been canceled without prejudice or disclaimer.

Rejection of Claim 1 under 35 U.S.C. § 102(b)

The Examiner has rejected claim 1 under 35 U.S.C. § 102(b) as being anticipated by Takamizawa et al. (Chem. Pharm. Bull. (1970), 18(6), 1201-10). The Examiner's position is that claim 1 reads on the compounds of RN 26734-75-8; 26734-74-7; 26734-75-8; 26734-76-9; 26734-77-0; 25626-39-5 and 25626-41-9. The Examiner has also rejected claim 1 under 35 U.S.C. § 102(b) as being anticipated by Gaozza et al. (J. Heterocycl. Chem. (1970), 7(4),

927-30). The Examiner's position is that claim 1 reads on the compounds of RN 28669-15-OP; 28669-16-1P and 28669-25-2P. (See CAS abstract and structure.) The Examiner has further rejected claim 1 under 35 U.S.C. § 102(b) as being anticipated by Sicardi et al. (J. Pharm. Sci. (1974), 63(8), 1336-7. The Examiner's position is that claim 1 reads on the compounds in Table 1, page 1336 of the reference. The Examiner has rejected claim 1 under 35 U.S.C. § 102(b) as being anticipated by Somer (Angew. Chem. (1976), 88(13), 449). The Examiner's position is that claim 1 reads on the compound of RN 59231-02-6P. The Examiner has rejected claim 1 under 35 U.S.C. § 102(b) as being anticipated by Westphal et al. (J. Prakt. Che. (1978), 320(3), 452-6). The Examiner's position is that claim 1 reads on the compounds in the CAS printout (see CAS abstract and structure). Finally, the Examiner has rejected claim 1 under 35 U.S.C. § 102(b) as being anticipated by Camparini et al. (J. Heterocycl. Chem. (1978), 15(8), 1271-6). The Examiner's position is that claim 1 reads on the compounds of RN 60206-70-4P; 60206-72-6P and 60206-74-8P (see CAS abstract and structure). Applicants respectfully traverse these rejections.

The compounds of Takamizawa et al. (RN26734-75-8 and 26734-74-7 in which R² is methyl) are different from the present invention. More specifically, claim 1 has been amended to

overcome the compound of Takamizawa et al. (26734-77-0, 26734-76-9, 25626-41-9 and 25626-39-5).

Gaozza et al. show RN28669-16-1, 28669-23-0 and 28669-25-2 in which R² is methyl or hydroxymethyl. These compounds are structurally different than the compounds of the invention. Gaozza et al. also show 28669-15-0. Claim 1 has been amended to overcome this rejection.

Sicardi et al., in Table 1, shows a compound having benzyl. Somer et al. shows RN59231-02-6 in which R¹ is methyl. Westphal et al. shows RN67947-71-1. Claim 1 has been amended to overcome each of these references. The triazine compound shown in Camparini et al. is different in structure from the present invention.

As stated by the Court of Appeals for the Federal Circuit in *Lindemann Maschinenfabrik GMBH v. American Hoist and Derrick Company et al.*, 221 USPQ 481 (1984):

Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim. *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 220 USPQ 193 (Fed. Cir. 1983); *SSIH Equip. S.A. v. USITC*, 718 F.2d 365, 218 USPQ 678 (Fed. Cir. 1983). In deciding the issue of anticipation, the trier of fact must identify the elements of the claims, determine their meaning in light of the specification and prosecution history, and identify corresponding elements disclosed in the allegedly anticipating reference. *SSIH*, supra; *Kalman*, supra.

The present claims do not contain every element of the prior art references. As such, the references discussed above do not anticipate the claimed invention. Withdrawal and reconsideration of the rejections are respectfully requested.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Jaconda Wagner (Reg. No. 42,207) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

Attached hereto is a marked-up version of the changes made to the application by this Amendment.

Pursuant to the provisions of 37 C.F.R. § 1.17 and 1.136(a), Applicants hereby petition for an extension of one (1) month to June 8, 2002 for the period in which to file a response to the outstanding Office Action. The required fee of \$110.00 is attached hereto.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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Attachment: Version with Markings to Show Changes Made

Appendix A :

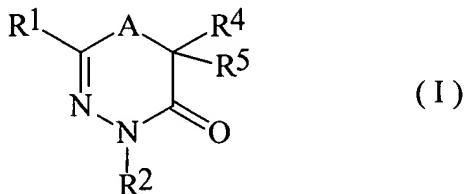
Castillo, J. et al.; Arias, C. et al.; Cha, J.J. et al.; Hardin-Pouzet, H. et al. and Brusa, R. et al.

(Rev. 02/20/02)

VERSION WITH MARKINGS TO SHOW CHANGES MADEIN THE CLAIMS:

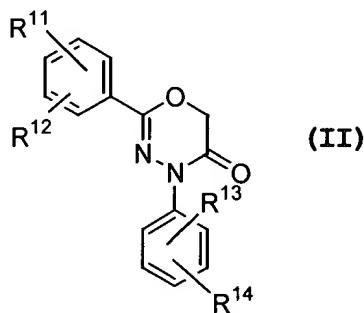
The claims have been amended as follows:

Claim 1. (Amended) A [heterodiazinon] compound represented by the following formula (I), a pharmacologically acceptable salt thereof or hydrates thereof: [.]



[In the formula,] wherein A represents oxygen, sulfur or a group represented by the formula $>NR^3$ (wherein R^3 represents hydrogen atom or a lower alkyl group); R^1 [and R^2 are the same as or different from each other and each] represents an optionally substituted aryl group, an optionally substituted heteroaryl group, an optionally substituted aralkyl group, an optionally substituted heteroaryl alkyl group, an optionally substituted aryl alkenyl group, an optionally substituted heteroaryl alkenyl group, an optionally substituted piperidyl group, an optionally

substituted piperazinyl group, a morpholinyl group, an optionally substituted lower cycloalkyl group, a tetrahydrofuryl group, a tetrahydropyranyl group, an adamantyl group, an optionally substituted amino group or an optionally substituted amide group; R² represents an optionally substituted aryl group, an optionally substituted heteroaryl group, an optionally substituted aryl alkenyl group, an optionally substituted heteroaryl alkenyl group, an optionally substituted piperidyl group, an optionally substituted piperazinyl group, a morpholinyl group, an optionally substituted lower cycloalkyl group, a tetrahydrofuryl group, a tetrahydropyranyl group, an adamantyl group, an optionally substituted amino group or an optionally substituted amide group; and R⁴ and R⁵ are the same as or different from each other and each represents hydrogen atom, hydroxyl group, [a halogen atom,] nitrile group, nitro group, a lower alkyl group, an aryl group or a heteroaryl group, provided that the compounds represented by the following formula (II):



(wherein R¹¹ and R¹² are the same as or different from each other and each represents hydrogen atom, fluorine, chlorine, bromine, iodine, a C1-C2 fluoroalkyl group, a C1-C2 chloroalkyl group, a C1-C2 bromoalkyl group, a C1-C6 alkyl group, a C3-C6 cycloalkyl group, a C7-C9 aralkyl group, phenyl group, a C1-C6 alkoxy group, a C1-C6 alkylthio group, a C1-C6 alkylsulfinyl group, a C7-C9 aralkoxy group, phenoxy group, phenylthio group, phenylsulfonyl group, an alkali metal carboxylate C2-C5 alkoxycarbonyl group or a group represented by the formula -N(R¹⁵)R¹⁶ (wherein R¹⁵ and R¹⁶ are the same as or different from each other and each represents hydrogen atom or a C1-C2 alkyl group); and R¹³ and R¹⁴ are the same as or different from each other and each represents a C₁₋₄ alkylsulfonyl group, nitro group, a group represented by the formula -OCH_nX_{3-n} (wherein X represents fluorine, chlorine, bromine or iodine; and n is an integer of 1 to 3) or the same groups as defined above for R¹¹ and R¹²) are excluded.

Claim 2. (Amended) The [heterodiazinon] compound according to claim 1, a pharmacologically acceptable salt thereof or hydrates thereof, wherein R⁴ and R⁵ are the same as or different from each other and each represents hydrogen atom, hydroxyl group, a C₁₋₆ alkyl group or an aryl group.

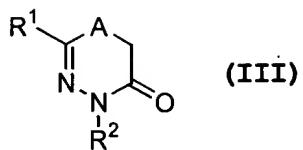
Claim 3. (Amended) The [heterodiazinon] compound according to claim 1, a pharmacologically acceptable salt thereof or hydrates thereof, wherein R⁴ is hydrogen atom and R⁵ is hydroxyl group, a C₁₋₆ alkyl group or an aryl group.

Claim 4. (Amended) The [heterodiazinon] compound according to claim 1, a pharmacologically acceptable salt thereof or hydrates thereof, wherein R⁴ is hydrogen atom and R⁵ is hydroxyl group, methyl group, ethyl group, n-propyl group, i-propyl group or phenyl group.

Claim 5. (Amended) The [heterodiazinon] compound according to claim 1, a pharmacologically acceptable salt thereof or hydrates thereof, wherein R⁴ and R⁵ are the same as or different from each other and each represents methyl group, ethyl group, n-propyl group or i-propyl group.

Claim 6. (Amended) The [heterodiazinon] compound according to claim 1, a pharmacologically acceptable salt thereof or hydrates thereof, wherein A is oxygen.

Claim 7. (Amended) The [heterodiazinon] compound according to claim 1, wherein R⁴ and R⁵ are hydrogen and which is represented by the following formula (III):



(wherein A, R¹ and R² have the same meanings as defined above), a pharmacologically acceptable salt thereof or hydrates thereof.

Claim 8. (Amended) The [heterodiazinon] compound according to claim 7, a pharmacologically acceptable salt thereof or hydrates thereof, wherein R¹ is an optionally substituted aryl group, an optionally substituted heteroaryl group, an optionally substituted aralkyl group, an optionally substituted heteroaryl alkyl group, an optionally substituted aryl alkenyl group, an optionally substituted heteroaryl alkenyl group, a morpholiny group, a lower cycloalkyl group, an optionally substituted amino group or an optically substituted amide group; and R² is an optionally substituted aryl group, an optionally substituted heteroaryl group, an optionally substituted aralkyl group, an optionally substituted heteroaryl alkyl group, a lower cycloalkyl group, a tetrahydrofuranyl group, a tetrahydropyran group, an optionally substituted piperidyl group or an adamantyl group.

Claim 9. (Amended) The [heterodiazinon] compound according to claim 7 or 8, a pharmacologically acceptable salt thereof or

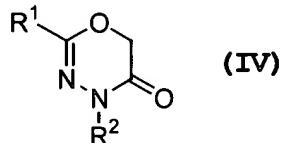
hydrates thereof, wherein the substituent groups on R¹ and R² are hydrogen atom, halogen atom, hydroxyl group, lower alkyl group, lower alkenyl group, lower alkynyl group, lower alkoxy group, lower thioalkoxy group, hydroxy lower thioalkoxy group, arylthio group, heteroaryl thio group, heteroaryl(hydroxy)alkyl group, halogenated lower alkyl group, hydroxy lower alkyl group, dihydroxy lower alkyl group, halogenated (hydroxy) lower alkyl group, hydroxyalkenyl group, hydroxyalkynyl group, hydroxy lower cycloalkenyl group, lower alkoxy(hydroxy)alkyl group, lower alkoxy(hydroxy)alkoxy group, lower alkoxy alkyl group, lower alkoxy alkoxy group, lower thioalkoxy alkoxy group, lower alkyl sulfonyl alkoxy group, hydroxy lower alkoxy group, dihydroxy lower alkoxy group, hydroxy lower alkyl alkoxy group, hydroxy imino lower alkyl group, lower cycloalkyl(hydroxy)alkyl group, aralkyl group, hydroxyaralkyl group, cyano group, cyano lower alkyl group, amide group, N-lower alkyl amide group, N-lower cycloalkyl amide group, N,N-di-lower alkyl amide group, N-hydroxy lower alkyl amide group, N-hydroxy lower alkyl-N-lower alkyl amide group, N-aryl amide group, cyclic aminocarbonyl group, carbamoyl group, N-lower alkyl carbamoyl group, N,N-di-lower alkyl carbamoyl group, aminosulfonyl group, cyclic aminosulfonyl group, N-lower alkyl aminosulfonyl group, N-lower cycloalkyl aminosulfonyl group, N,N-di-lower alkyl aminosulfonyl group, N-hydroxy lower alkyl aminosulfonyl group, N-lower alkoxy

alkyl aminosulfonyl group, N-halogenated lower alkyl sulfonyl group, pyrrolidinyl sulfonyl group, lower alkyl sulfonyl amino alkyl group, N-lower alkyl aminosulfonyl alkyl group, N,N-di-lower alkyl aminosulfonyl alkyl group, lower acyl group, lower acyl alkyl group, lower cycloalkyl(hydroxy)methyl group, tetrahydropyranyl group, hydroxytetrahydropyranyl group, hydroxy lower alkyl tetrahydropyranyl group, lower acyl amino alkyl group, (thiazole-2-yl)hydroxymethyl group, di(thiazole-2-yl)hydroxymethyl group, lower alkyl sulfonyl group, lower alkoxy alkyl sulfonyl group, hydroxy lower alkyl sulfonyl group, lower alkyl sulfonyl alkyl group, N-lower alkyl amide alkyl group, aryl group, aralkyl group, heteroaryl group, heteroaryl lower alkyl group, heteroaryl lower alkoxy group, heteroaryl sulfonyl group, 4-morpholinyl sulfonyl group, 4-oxythiomorpholinyl sulfonyl group, 4-dioxythiomorpholinyl sulfonyl group, 4-morpholinyl sulfonyl group, hydroxy lower cycloalkyl group, hydroxy lower cycloalkyloxy group, hydroxy cycloalkenyl group, halogenated hydroxy lower alkyl group, 4-hydroxypiperidyl group, 4-lower alkoxypiperidyl group, ω,ω -lower alkylene dioxyalkyl group, ω,ω -lower alkylene dioxy alkoxy group, lower cycloalkyl hydroxy methyl group, aryloxy group, aryl aminosulfonyl group, amino group, lower alkyl amino group, di-lower alkyl amino group, hydroxy lower alkyl amino group, lower acyl amino group,

hydroxy lower acyl amino group, lower alkyl sulfonyl amino group, pyridyl lower alkoxy group, lower alkyl pyridyl alkoxy group, lower alkoxy hydroxy alkoxy group, lower thioalkoxy alkoxy group, lower alkyl sulfonyl alkoxy group, N-lower alkyl carbamoyl group, N,N-di-lower alkyl carbamoyl group, N-hydroxy lower alkyl carbamoyl group, N-hydroxy lower alkyl-N-lower alkyl carbamoyl group, halogenated lower alkoxy group, cyano lower alkoxy group, hydroxy lower cycloalkoxy group, trifluoromethyl group, trifluoromethoxy group, amino lower alkoxy group, N-lower alkyl aminoalkoxy group, N,N-di-lower alkyl aminoalkoxy group, lower acyl alkoxy group, lower acyl aminoalkoxy group, (1,3-dioxolanyl) lower alkyl group, (1,3-dioxolanyl) lower alkoxy group, amide lower alkoxy group, 4-(hydroxy alkyl)tetrahydropyran-4-yl group, 2,3-dihydrobenzofuranyl group, 2-hydroxy-2-alkyl-2,3-dihydrobenzofuranyl group, indanonyl group, hydroxyindanyl group, imidazolyl lower alkoxy group, succimide group or 2-oxazolidone-3-yl group, optionally substituted benzoyloxy lower alkyl group, optionally substituted amino lower alkoxy group, optionally substituted aralkyloxy group, optionally substituted heteroaryl alkoxy group, optionally substituted morpholinyl lower alkoxy group, optionally substituted piperidyl lower alkoxy group, optionally substituted

piperazinyl lower alkoxy group or optionally substituted pyrrolidinyl lower alkoxy group.

Claim 10. (Amended) The [heterodiazinon] compound according to claim 7 represented by the following formula (IV):



(wherein R^1 and R^2 have the same meanings as defined above), a pharmacologically acceptable salt thereof or hydrates thereof.

Claim 11. (Amended) The [heterodiazinon] compound according to claim 7, a pharmacologically acceptable salt thereof or hydrates thereof, wherein the aryl group is a group selected from phenyl group, indenyl group, naphthyl group, azulenyl group, heptalenyl group and anthanyl group; the heteroaryl group is a group selected from thienyl group, furyl group, pyranyl group, pyrrolyl group, imidazolyl group, pyrazolyl group, triazolyl group, tetrazolyl group, isothiazolyl group, thiazolyl group, thiadiazolyl group, isoxazolyl group, pyridyl group, pyrazinyl group, pyrimidyl group, pyridazinyl group, indolizinyl group, isoindolyl group, indolyl group, indazolyl group, isoquinolyl group, quinolyl group, phthalazinyl group, naphthylidinyl group, quinoxalinyl group, quinazolinyl

group and cinolynyl group; and the lower cycloalkyl group is a group selected from cyclopropyl group, cyclobutyl group, cyclopentyl group, cyclohexyl group, cycloheptyl group and cyclooctyl group.

Claim 12. (Amended) The [heterodiazinon] compound according to claim 7, which is the compound selected from the following compounds or pharmacologically acceptable salts thereof or hydrates thereof[.]:

- (1) 2-(2-Pyridyl)-4-phenyl-4H-1,3,4-oxadiazine-5(6H)-one,
- (2) 2-(2-pyrazinyl)-4-phenyl-4H-1,3,4-oxadiazine-5(6H)-one,
- (3) 2-(1-methyl-2-pyrolyl)-4-phenyl-4H-1,3,4-oxadiazine-5(6H)-one,
- (4) 2,4-diphenyl-4H-1,3,4-oxadiazine-5(6H)-one,
- (5) 2-(2,3-dimethoxyphenyl)-4-phenyl-4H-1,3,4-oxadiazine-5(6H)-one,
- (6) 2-(2-pyrrolyl)-4-phenyl-4H-1,3,4-oxadiazine-5(6H)-one,
- (7) 2-(2-quinolyl)-4-phenyl-4H-1,3,4-oxadiazine-5(6H)-one,
- (8) 2-(6-methyl-2-pyridyl)-4-phenyl-4H-1,3,4-oxadiazine-5(6H)-one,
- (9) 2-benzoyloxymethyl-4-phenyl-4H-1,3,4-oxadiazine-5(6H)-one,
- (10) 2-(2-pyridyl)-4-(2,4-difluorophenyl)-4H-1,3,4-oxadiazine-5(6H)-one,
- (11) 2-(2-pyridyl)-4-cyclohexyl-4H-1,3,4-oxadiazine-5(6H)-one,

(12) 2-(2-chloro-4-pyridyl)-4-phenyl-4H-1,3,4-oxadiazine-5(6H)-one,

(13) 2-(3-methoxy-2-pyridyl)-4-phenyl-4H-1,3,4-oxadiazine-5(6H)-one,

(14) 2-(3-hydroxy-2-pyridyl)-4-phenyl-4H-1,3,4-oxadiazine-5(6H)-one,

(15) 2-styryl-4-phenyl-4H-1,3,4-oxadiazine-5(6H)-one,

(16) 2-[2-(3-pyridyl)vinyl]-4-phenyl-4H-1,3,4-oxadiazine-5(6H)-one,

(17) 2-(2-methoxyphenyl)-4-(2-bromophenyl)-4H-1,3,4-oxadiazine-5(6H)-one,

(18) 2-(4-nitrophenyl)-4-phenyl-4H-1,3,4-oxadiazine-5(6H)-one,

(19) 2-(3-nitrophenyl)-4-phenyl-4H-1,3,4-oxadiazine-5(6H)-one,

(20) 2-(2-nitrophenyl)-4-phenyl-4H-1,3,4-oxadiazine-5(6H)-one,

(21) 2-(4-morpholinyl)-4-phenyl-4H-1,3,4-oxadiazine-5(6H)-one,

(22) 2-cyclohexyl-4-phenyl-4H-1,3,4-oxadiazine-5(6H)-one,

(23) 2-dimethylamino-4-phenyl-4H-1,3,4-oxadiazine-5(6H)-one,

(24) 2-dimethylamino-4-phenyl-4H-1,3,4-thiadiazine-5(6H)-one,

(25) 2-(2,6-dimethoxyphenyl)-4-phenyl-4H-1,3,4-oxadiazine-5(6H)-one,

(26) 2-(2-methoxyphenyl)-4-(2-fluorophenyl)-4H-1,3,4-oxadiazine-5(6H)-one,

(27) 2-phenyl-4-cyclohexyl-4H-1,3,4-oxadiazine-5(6H)-one,

(28) 2-(2-methoxyphenyl)-4-cyclohexyl-4H-1,3,4-oxadiazine-5(6H)-one,

(29) 2-(3-pyridyl)-4-phenyl-4H-1,3,4-oxadiazine-5(6H)-one,

(30) 2-phenyl-4-(2-bromophenyl)-4H-1,3,4-oxadiazine-5(6H)-one,

(31) 2-(2-thienyl)-4-phenyl-4H-1,3,4-oxadiazine-5(6H)-one,

(32) 2-benzyl-4-phenyl-4H-1,3,4-oxadiazine-5(6H)-one,

(33) 2-(2-pyridyl)-4-(2-bromophenyl)-4H-1,3,4-oxadiazine-5(6H)-one,

(34) 2-(2-pyridyl)-4-(2-fluorophenyl)-4H-1,3,4-oxadiazine-5(6H)-one,

(35) 2-(2-pyridyl)-4-(2-methoxyphenyl)-4H-1,3,4-oxadiazine-5(6H)-one,

(36) 2-phenyl-4-(2-cyanophenyl)-4H-1,3,4-oxadiazine-5(6H)-one,

(37) 2-phenyl-4-(2-nitrophenyl)-4H-1,3,4-oxadiazine-5(6H)-one,

(38) 2-phenyl-4-(2-pyridyl)-4H-1,3,4-oxadiazine-5(6H)-one,

(39) 2-phenyl-4-(3-pyridyl)-4H-1,3,4-oxadiazine-5(6H)-one,

(40) 2-phenyl-4-(3-cyano-2-pyridyl)-4H-1,3,4-oxadiazine-5(6H)-one,

(41) 2-phenyl-4-(2-hydroxymethylphenyl)-4H-1,3,4-oxadiazine-5(6H)-one,

(42) 2-phenyl-4-(2-cyano-3-pyridyl)-4H-1,3,4-oxadiazine-5(6H)-one,

(43) 2-phenyl-4-(2-thienyl)-4H-1,3,4-oxadiazine-5(6H)-one,

(44) 2-phenyl-4-(3-thienyl)-4H-1,3,4-oxadiazine-5(6H)-one,

(45) 2-phenyl-4-(4-cyanophenyl)-4H-1,3,4-oxadiazine-5(6H)-one,

(46) 2-phenyl-4-(3-cyanophenyl)-4H-1,3,4-oxadiazine-5(6H)-one,

(47) 2-phenyl-4-(2-cyano-3-thienyl)-4H-1,3,4-oxadiazine-5(6H)-one,

(48) 2-(2-hydroxyphenyl)-4-(2-bromophenyl)-4H-1,3,4-oxadiazine-5(6H)-one,

(49) 2-(2-hydroxyphenyl)-4-phenyl-4H-1,3,4-oxadiazine-5(6H)-one,

(50) 2-phenyl-4-(2-hydroxyphenyl)-4H-1,3,4-oxadiazine-5(6H)-one,

(51) 2-(2-hydroxyphenyl)-4-(2-fluorophenyl)-4H-1,3,4-oxadiazine-5(6H)-one,

(52) 2-(2-hydroxyphenyl)-4-(4-fluorophenyl)-4H-1,3,4-oxadiazine-5(6H)-one,

(53) 2-(2-hydroxyphenyl)-4-(2,4-difluorophenyl)-4H-1,3,4-oxadiazine-5(6H)-one,

(54) 2-[2-(2-dimethylamino)ethoxyphenyl]-4-(2-bromophenyl)-4H-1,3,4-oxadiazine-5(6H)-one,

(55) 2-[2-(4-pyridyl)methoxyphenyl]-4-phenyl-4H-1,3,4-oxadiazine-5(6H)-one,

(56) 2-{2-[2-(4-morpholinyl)ethoxy]phenyl}-4-phenyl-4H-1,3,4-oxadiazine-5(6H)-one,

(57) 2-[2-(2-pyridyl)methoxyphenyl]-4-phenyl-4H-1,3,4-oxadiazine-5(6H)-one,

(58) 2-[2-(3-pyridyl)methoxyphenyl]-4-phenyl-4H-1,3,4-oxadiazine-5(6H)-one,

(59) 2-[2-[2-(1-piperidyl)ethoxy]phenyl]-4-phenyl-4H-1,3,4-oxadiazine-5(6H)-one,

(60) 2-[2-[2-(1-pyrrolidinyl)ethoxy]phenyl]-4-phenyl-4H-1,3,4-oxadiazine-5(6H)-one,

(61) 2-[2-(2-dimethylaminoethoxy)phenyl]-4-phenyl-4H-1,3,4-oxadiazine-5(6H)-one,

(62) 2-[2-(3-dimethylaminopropoxy)phenyl]-4-phenyl-4H-1,3,4-oxadiazine-5(6H)-one,

(63) 2-[2-[3-(1-piperidinyl)propoxy]phenyl]-4-phenyl-4H-1,3,4-oxadiazine-5(6H)-one,

(64) 2-phenyl-{4-[2-(4-morpholinyl)ethoxy]phenyl}-4H-1,3,4-oxadiazine-5(6H)-one,

(65) 2-phenyl-4-[2-(2-dimethylaminoethoxy)phenyl]-4H-1,3,4-oxadiazine-5(6H)-one,

(66) 2-[2-(2-dimethylaminoethoxy)phenyl]-4-(2-fluorophenyl)-4H-1,3,4-oxadiazine-5(6H)-one,

(67) 2-[2-[2-(4-morpholinyl)ethoxy]phenyl]-4-(2-fluorophenyl)-4H-1,3,4-oxadiazine-5(6H)-one,

(68) 2-[2-[2-(4-morpholinyl)ethoxy]phenyl]-4-(2-bromophenyl)-4H-1,3,4-oxadiazine-5(6H)-one,

(69) 2-[2-[2-(4-morpholinyl)ethoxy]phenyl]-4-cyclohexyl-4H-1,3,4-oxadiazine-5(6H)-one,

(70) 2-[2-[2-(4-morpholinyl)ethoxy]phenyl]-4-(4-fluorophenyl)-4H-1,3,4-oxadiazine-5(6H)-one,

(71) 2-{2-[2-(4-morpholinyl)ethoxy]phenyl}-4-(2,4-difluorophenyl)-4H-1,3,4-oxadiazine-5(6H)-one,

(72) 2-[3-(2-hydroxyethoxy)-2-pyridyl]-4-phenyl-4H-1,3,4-oxadiazine-5(6H)-one,

(73) 2-{3-[2-(4-morpholinyl)ethoxy]-2-pyridyl}-4-phenyl-4H-1,3,4-oxadiazine-5(6H)-one,

(74) 2-{3-[2-(1-piperidyl)ethoxy]-2-pyridyl}-4-phenyl-4H-1,3,4-oxadiazine-5(6H)-one,

(75) 2-{3-[2-(1-pyrrolidinyl)ethoxy]-2-pyridyl}-4-phenyl-4H-1,3,4-oxadiazine-5(6H)-one,

(76) 2-{3-[2-(1-methyl-2-pyrrolidinyl)ethoxy]-2-pyridyl}-4-phenyl-4H-1,3,4-oxadiazine-5(6H)-one,

(77) 2-[3-(2-dimethylaminoethoxy)-2-pyridyl]-4-phenyl-4H-1,3,4-oxadiazine-5(6H)-one,

(78) 2-(3-aminophenyl)-4-phenyl-4H-1,3,4-oxadiazine-5(6H)-one,

(79) 2-(2-aminophenyl)-4-phenyl-4H-1,3,4-oxadiazine-5(6H)-one,

(80) 2-phenyl-4-(tetrahydro-4H-pyran-4-yl)-4H-1,3,4-oxadiazine-5(6H)-one,

(81) 2-phenyl-4-(1-methyl-4-piperidyl)-4H-1,3,4-oxadiazine-5(6H)-one,

(82) 2-phenyl-4-(3-quinuclidinyl)-4H-1,3,4-oxadiazine-5(6H)-one,

(83) 2-pyridyl-4-(1-benzyl-4-piperidyl)-4H-1,3,4-oxadiazine-5(6H)-one,

(84) 2-phenyl-4-(3-tetrahydrofuryl)-4H-1,3,4-oxadiazine-5(6H)-one,

(85) 2-phenyl-4-cyclopentyl-4H-1,3,4-oxadiazine-5(6H)-one,

(86) 2-phenyl-4-(1-benzyl-4-piperidyl)-4H-1,3,4-oxadiazine-5(6H)-one,

(87) 2-phenyl-4-[1-(2-pyridyl)ethyl]-4H-1,3,4-oxadiazine-5(6H)-one,

(88) 2-phenyl-4-[1-(3-pyridyl)ethyl]-4H-1,3,4-oxadiazine-5(6H)-one,

(89) 2-phenyl-4-[1-(4-pyridyl)ethyl]-4H-1,3,4-oxadiazine-5(6H)-one,

(90) 2-(3-dimethylaminophenyl)-4-phenyl-4H-1,3,4-oxadiazine-5(6H)-one,

(91) 2-(2-dimethylaminophenyl)-4-phenyl-4H-1,3,4-oxadiazine-5(6H)-one,

(92) 2-[2-(4-pyridyl)methylaminophenyl]-4-phenyl-4H-1,3,4-oxadiazine-5(6H)-one,

(93) 2-[2-(3-pyridyl)methylaminophenyl]-4-phenyl-4H-1,3,4-oxadiazine-5(6H)-one,

(94) 2-(4-pyridyl)-4-phenyl-4H-1,3,4-oxadiazine-5(6H)-one,

(95) N-(2-pyridyl)-[4-phenyl-4H-1,3,4-oxadiazine-5(6H)-one-2-yl]carboxamide,

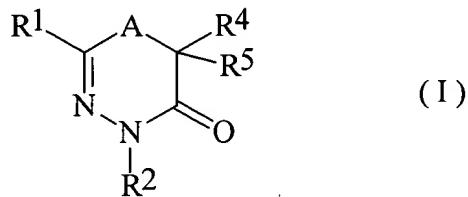
(96) N-(3-pyridyl)-[4-phenyl-4H-1,3,4-oxadiazine-5(6H)-one-2-yl]carboxamide,

(97) N-(4-pyridyl)-[4-phenyl-4H-1,3,4-oxadiazine-5(6H)-one-2-yl]carboxamide,

(98) 1,3-diphenyl-4-methyl-4,5-dihydro-1,2,4-triazine-6(1H)-one and

(99) 1-phenyl-3-(2-pyridyl)-4-methyl-4,5-dihydro-1,2,4-triazine-6(1H)-one.

Claim 13. (Amended) A pharmaceutical composition comprising a pharmacologically acceptable amount of the compound represented by the following formula (I), a pharmaceutically acceptable salt thereof or hydrates thereof, and pharmacologically acceptable carriers: [.]

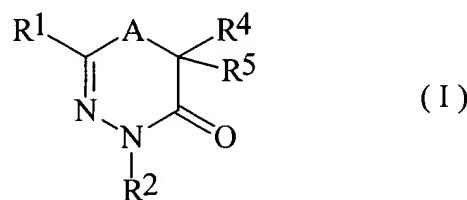


[In the formula,] wherein A represents oxygen, sulfur or a group represented by the formula $>NR^3$ (wherein R^3 represents hydrogen atom or a lower alkyl group); R^1 and R^2 are the same as or different from each other and each represents an optionally substituted aryl group, an optionally substituted heteroaryl group, an optionally substituted aralkyl group, an optionally

substituted heteroaryl alkyl group, an optionally substituted aryl alkenyl group, an optionally substituted heteroaryl alkenyl group, an optionally substituted piperidyl group, an optionally substituted piperazinyl group, a morpholiny group, an optionally substituted lower cycloalkyl group, a tetrahydro-furanyl group, a tetrahydropyranyl group, an adamantyl group, an optionally substituted amino group or an optionally substituted amide group; and R⁴ and R⁵ are the same as or different from each other and each represents hydrogen atom, hydroxyl group, halogen atom, nitrile group, nitro group, a lower alkyl group, an aryl group or a heteroaryl group,

15. (Amended) A pharmaceutical preparation comprising the compound represented by the following formula (I), a pharmaceutically acceptable salt thereof or hydrates thereof:

[.]



[In the formula,] wherein A represents oxygen, sulfur or a group represented by the formula >NR³ (wherein R³ represents

hydrogen atom or a lower alkyl group); R¹ and R² are the same as or different from each other and each represents an optionally substituted aryl group, an optionally substituted heteroaryl group, an optionally substituted aralkyl group, an optionally substituted heteroaryl alkyl group, an optionally substituted heteroaryl alkenyl group, an optionally substituted piperidyl group, an optionally substituted piperazinyl group, a morpholinyl group, an optionally substituted lower cycloalkyl group, a tetrahydrofuranyl group, a tetrahydropyranyl group, an adamantyl group, an optionally substituted amino group or an optionally substituted amide group; and R⁴ and R⁵ are the same as or different from each other and each represents hydrogen atom, hydroxyl group, a halogen atom, nitrile group, nitro group, a lower alkyl group, an aryl group or a heteroaryl group. [,]

Claim 32 is added.